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SANTA CRUZ BIOTECHNOLOGY, INC.

α-tectorin siRNA (m): sc-45731

BACKGROUND

α-tectorin (also designated TECTA) is an important non-collagenous component of the tectorial membrane which is an extracellular matrix of the inner ear. The tectorial membrane covers the cochleas neuroepithelium and contacts the stereocilia bundles of specialized sensory hair cells. Sound gets transduced into electrical signals by the movement of these hair cells relative to the tectorial membrane as the stereocilia deflect and cause fluctuations in hair-cell membrane potential. The α-tectorin protein can form homomeric or heteromeric filaments after self-association or association with β-tectorin, respectively. Mutations in the α-tectorin gene can cause autosomal dominant non-syndromic sensorineural deafness. The localization of these mutations in different modules of the protein may cause different clinical features.

REFERENCES

1. Iimura, O., Wakabayashi, C., Kobayashi, T., Shoji, T., Yoshida, S. and Miyahara, M. 1976. Studies on experimental coronary insufficiency. II. Effects of β-adrenergic blocking agent (propranolol) on metabolic response to adrenaline and noradrenaline in dogs with coronary constriction. Recent Adv. Stud. Cardiac Struct. Metab. 12: 543-547.
2. Legan, P.K., Lukashkina, V.A., Goodyear, R.J., Kossi, M., Russell, I.J. and Richardson, G.P. 2000. A targeted deletion in α-tectorin reveals that the tectorial membrane is required for the gain and timing of cochlear feedback. Neuron 28: 273-285.
3. Maeda, Y., Fukushima, K., Kasai, N., Maeta, M. and Nishizaki, K. 2001. Quantification of TECTA and DFNA5 expression in the developing mouse cochlea. Neuroreport 12: 3223-3226.
4. Iwasaki, S., Harada, D., Usami, S., Nagura, M., Takeshita, T. and Hoshino, T. 2002. Association of clinical features with mutation of TECTA in a family with autosomal dominant hearing loss. Arch. Otolaryngol. Head Neck Surg. 128: 913-917
5. Pfister, M., Thiele, H., Van Camp, G., Fransen, E., Apaydin, F., Aydin, O., Leistenschneider, P., Devoto, M., Zenner, H.P., Blin, N., Nurnberg, P., Ozkarakas, H. and Kupka, S. 2004. A genotype-phenotype correlation with gender-effect for hearing impairment caused by TECTA mutations. Cell Physiol. Biochem. 14: 369-376.

CHROMOSOMAL LOCATION

Genetic locus: Tecta (mouse) mapping to 9 A5.1.

PRODUCT

α-tectorin siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see α-tectorin shRNA Plasmid (m): sc-45731-SH and α-tectorin shRNA (m) Lentiviral Particles: sc-45731-V as alternate gene silencing products.

For independent verification of α-tectorin (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-45731A, sc-45731B and sc-45731C.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

α-tectorin siRNA (m) is recommended for the inhibition of α-tectorin expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor α-tectorin gene expression knockdown using RT-PCR Primer: α-tectorin (m)-PR: sc-45731-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.